

AMENDMENTS TO THE CLAIMS

1-47. (CANCELED)

48. (CURRENTLY AMENDED) A blood glucose monitoring system for monitoring a blood glucose level ~~physiological condition~~ and for providing health-related information comprising:

(a) a display device including a display screen which displays the blood glucose level as measured;

(b) an audio speaker;

(c) a processor configured to provide audio and visual signals to the audio speaker and display device respectively;

(d) at least one built-in memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:

(i) controlling the blood glucose monitoring system;

(ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

(iii) based on the comparing, guiding a user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof;

(e) at least one physiological data monitor configured to (i) provide a measurement signal representative of a user physiological parameter of the user and (ii) operate while being physically separated from said processor and outside a housing containing said processor;

(f) an interface coupled between the processor and the physiological data monitor to at least isolate electrically the

physiological data monitor from the processor, wherein the electrically isolating interface (i) is neither entirely disposed within said housing containing said processor nor any housing containing said physiological data monitor, ~~and (ii) comprises more than approximately a quarter of a physical distance separating said~~
35 ~~physiological data monitor and said housing of said processor;~~ and

(g) a program controller configured to:

(i) receive an input from ~~a~~ the user;

(ii) enable the user to (1) make selections and (2) control one or more user functions of the blood glucose monitoring system;
40 system;

(iii) provide detailed information to the user based upon (1) operations of the program controller as controlled by the user, (2) predetermined software routines and (3) the operation data stored within the blood glucose monitoring system; and
45 stored within the blood glucose monitoring system; and

(iv) provide a control signal to the processor based upon the ~~user's~~ input, thereby to cause the health related information to be provided to the user based upon the measurement signal representative of the blood glucose level ~~physiological~~
50 ~~parameter~~ and the control signal,

(h) wherein the physiological parameter includes ~~a~~ the blood glucose level and the physiological data monitor includes a blood glucose indicator.

49. (CANCELED)

50. (CURRENTLY AMENDED) The system according to claim 48, wherein the interface includes:

(a) a signal receiver for receiving the measurement signal representative of ~~a~~ the blood glucose level from the at least one
5 physiological data monitor;

(b) a converter for converting the received measurement signal as received into a form acceptable to the processor; and

(c) a processor controller for controlling the processor.

51. (CURRENTLY AMENDED) A system for interactively monitoring a blood glucose level and for interactively providing health-related information comprising:

(a) a glucose monitor adapted to measure ~~a~~ the blood glucose level of a user and for generating a first signal in response to a measurement of the blood glucose level;

(b) a processor (i) for receiving a second signal that is a function of the first signal, (ii) being contained within a housing, and (iii) configured to operate while being physically separated from said glucose monitor, said glucose monitor being disposed outside said housing containing said processor;

(c) an interface coupled between the blood glucose monitor and the processor;

(i) for receiving the first signal from the blood glucose monitor; and

(ii) for providing the second signal to the processor;

(iii) configured to isolate electrically the user from the processor, wherein the electrically isolating interface ~~(i)~~ is neither entirely disposed within said housing containing said processor nor any housing containing said glucose monitor and ~~(ii)~~ comprises more than approximately a quarter of a physical distance separating said glucose monitor and said housing of said processor;

(d) a memory coupled to the processor for storing blood level data, the memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:

(i) controlling the system;

(ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

(iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof; and

(e) a display system coupled to the processor for displaying a representation of the blood glucose level data, so as to provide the health related information to the user in an interactive manner; and

(f) a program controller (i) enabling the user (1) to make selections and (2) to control one or more user functions of the system and (ii) providing detailed information to the user based upon (1) operations of the program controller as controlled by the user, (2) predetermined software routines and (3) the operation data stored within the system.

52. (PREVIOUSLY PRESENTED) The system according to claim 51, wherein the interface utilizes optical isolation.

53. (CANCELED)

54. (CANCELED)

55. (CURRENTLY AMENDED) The system according to claim 48 ~~54~~ wherein the program controller is hand-held.

56. (CURRENTLY AMENDED) The system according to claim 48 ~~54~~, wherein the program controller receives the input from the user through at least one push button switch.

57. (CURRENTLY AMENDED) The system according to claim 48, wherein the health related information provided to the user includes moving images displayed on the display screen.

58. (PREVIOUSLY PRESENTED) The system according to claim 57, wherein the health related information provided to the user further includes a comparison of measurements of the blood glucose level with previously stored measurements of the blood glucose level.

59. (PREVIOUSLY PRESENTED) The system according to claim 57, wherein the health related information provided to the user includes educational information.

60. (CURRENTLY AMENDED) The system according to claim 48, wherein the blood glucose monitoring system is configured to store the particular information on the at least one built-in memory for later retrieval.

61. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the display device is a television display and the processor has at least one removable memory.

62. (CURRENTLY AMENDED) A method for monitoring a physiological condition and for providing health-related information with a system, the method comprising:

(a) using at least one physiological data monitor to provide a measurement signal representative of a user physiological parameter;

(b) providing a processor to produce audio and a visual signals for reproduction at an audio speaker and a display screen, respectively, and (i) providing said processor within a housing, (ii) operating said processor while being physically separated from said

physiological data monitor, and (iii) said physiological data monitor being disposed outside said housing containing said processor;

(c) electrically isolating the processor and the physiological data monitor, wherein the electrical isolating ~~(+)~~ occurs neither entirely within said housing containing said processor nor any housing containing said physiological data monitor and ~~(ii)~~ is provided by an interface comprising more than approximately a quarter of a physical distance separating said physiological data monitor and said housing of said processor;

(d) using a program controller to:

(i) to receive an input from ~~a~~ the user; and

(ii) to provide one or more controller signals to the processor based upon the ~~user's~~ input from the user; and

(e) in response to and based upon (i) the measurement signal representative of the user physiological parameter and (ii) the input from the user, having the processor cause the visual and audio signals of the health related information to be presented to the user,

(f) wherein the user physiological parameter includes a blood glucose level and the physiological data monitor includes a blood glucose indicator;

(g) providing, in a memory coupled to the processor, the memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, the blood glucose level and operation software routines for;

(i) controlling the system;

(ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

(iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, giving advice as the diet or exercise habits of the user,

performing one or more further processing functions in response to
45 the comparing, or combinations thereof; and

(h) further using the program controller (i) for enabling
the user (1) to make selections and (2) to control one or more user
functions of the system and (ii) for providing detailed information
to the user based upon (1) operations of the program controller as
50 controlled by the user and (2) predetermined software routines and
(3) data stored within the system.

63. (CANCELED)

64. (CURRENTLY AMENDED) The method according to claim 62,
further comprising:

(a) receiving ~~a~~ the measurement signal representative of
5 ~~a the~~ blood glucose level from the at least one physiological data
monitor;

(b) converting the ~~received measurement~~ signal as received
into a form acceptable to the processor; and

(c) using a processor controller for controlling the
processor.

65. (PREVIOUSLY PRESENTED) The method according to claim
62, wherein the electrical isolation is achieved by optical
isolation.

66. (CANCELED)

67. (CANCELED)

68. (CURRENTLY AMENDED) The method according to claim 62
67 wherein the program controller is hand-held.

69. (CURRENTLY AMENDED) The method according to claim 62
67, wherein the program controller receives the input from the user
through at least one push button switch.

70. (CURRENTLY AMENDED) The method according to claim 62,
wherein the health related information provided to the user includes
moving images displayed on the display screen.

71. (CURRENTLY AMENDED) The method according to claim 70,
wherein the health related information provided to the user further
includes a comparison of measurements of the user physiological
parameter with previously stored measurements of the user
5 physiological parameter.

72. (PREVIOUSLY PRESENTED) The method according to claim
70, wherein the health related information provided to the user
includes educational information.

73. (CURRENTLY AMENDED) The method according to claim 62,
further comprising storing the particular information ~~at least one in~~
the memory for later retrieval.

74. (CURRENTLY AMENDED) The method according to claim 62,
wherein the display screen ~~device~~ comprises a television, ~~and~~ the
visual signals are reproduced on the television and the processor has
at least one removable memory.

75. (CURRENTLY AMENDED) An apparatus for interactively
monitoring a blood glucose level and for interactively providing
health-related information comprising;

- a. a display device comprising a display screen;
- 5 b. a processor coupled to provide a visual signal to the
display screen, wherein the processor is contained within a housing;

c. an electrically isolating interface device coupled to the processor;

10 d. a glucose monitor coupled to provide a measurement
signal representative of ~~a~~ the blood glucose level to the
electrically isolating interface device, wherein the glucose monitor
is (i) configured to operate while being physically separated from
said processor and (ii) outside said housing containing said
15 processor, wherein the electrically isolating interface device ~~(i)~~ is
neither entirely disposed within said housing containing said
processor nor any housing containing said glucose monitor, ~~and (ii)~~
~~comprises more than approximately a quarter of a physical distance~~
~~separating said glucose monitor and said housing of said processor;~~
~~and-~~

20 e. a controller coupled to provide a control signal to
the processor based on ~~user an~~ input of the user, so as to provide
the health related information in an interactive manner; ~~and~~

25 f. at least one built-in memory, including read-only
digital memory (ROM) or writeable digital memory (RAM), or both,
having stored therein operation data and operation software routines
for:

(i) controlling the apparatus;

30 (ii) comparing the blood glucose level as measured
with stored measurements representative of normative blood glucose
levels; and

(iii) based on the comparing, guiding the user through
additional measurements, storing particular information for later
retrieval or downloading, recommending a certain action be taken by
the user, asking questions of the user, giving advice as to diet or
35 exercise habits of the user, performing one or more further
processing functions in response to the comparing, or combinations
thereof; and

g. a program controller configured to:

(i) receive an input from the user;

40 (ii) enable the user (1) to make selections and (2)
to control one or more user functions of the apparatus;

 (iii) provide detailed information to the user based
upon (1) operations of the program controller as controlled by the
user, (2) predetermined software routines and (3) the operation data
45 stored within the apparatus; and

 (iv) provide a control signal to the processor based
upon the input from the user, thereby to cause the health related
information to be provided to the user based upon the measurement
signal representative of the blood glucose level and the control
50 signal.

76. (PREVIOUSLY PRESENTED) The apparatus according to
claim 75 wherein the processor comprises a video game console.

77. (PREVIOUSLY PRESENTED) The apparatus according to
claim 75 wherein the display device comprises a television set.

78. (CURRENTLY AMENDED) The apparatus according to claim
75, further comprising:

a CD-ROM drive⁷¹ and ~~wherein the apparatus further~~
5 ~~comprises~~

an interchangeable compact disk removably coupled to the
CD-ROM drive for providing additional functionality to the processor.

79. (CURRENTLY AMENDED) The apparatus according to claim
75 wherein the electrically isolating interface device comprises⁷¹:

a. means for receiving the measurement signal
representative of a blood glucose level;

5 b. means for converting the measurement signal
representative of ~~a~~ the blood glucose level into a form acceptable to
the processor coupled to the means for receiving; and

c. means for controlling the processor coupled to the means for converting.

80. (CANCELED)

81. (CURRENTLY AMENDED) An apparatus for interactively monitoring a blood glucose level and for interactively providing health-related information comprising;

a. a display device comprising a display screen and an audio speaker;

b. a processor contained within a housing and coupled to provide a visual signal to the display screen;

c. an electrically isolating interface device coupled to the processor;

d. a glucose monitor coupled to provide a measurement signal representative of ~~a~~ the blood glucose level of a user to the electrically isolating interface device, wherein the glucose monitor is (i) configured to operate while being physically separated from said processor and (ii) outside said housing containing said processor, wherein the electrically isolating interface device ~~(i)~~ is neither entirely disposed within said housing containing said processor nor any housing containing said glucose monitor, ~~and (ii)~~ ~~comprises more than approximately a quarter of a physical distance separating said glucose monitor and said housing of said processor;~~ ~~and~~

e. a controller coupled to provide a control signal to the processor based on ~~a user's~~ an input received from the user, so as to provide the health related information to the user in an interactive manner based upon the measurement signal representative of the blood glucose level and the control signal;

f. at least one built-in memory, including read-only digital memory (ROM) or writeable digital memory (RAM), or both,

having stored therein operation data and operation software routines for:

- 30 (i) controlling the apparatus;
 (ii) comparing the blood glucose level as measured
with stored measurements representative of normative blood glucose
levels; and
 (iii) based on the comparing, guiding the user through
35 additional measurements, storing particular information for later
retrieval or downloading, recommending a certain action be taken by
the user, asking questions of the user, giving advice as to diet or
exercise habits of the user, performing one or more further
processing functions in response to the comparing, or combinations
40 thereof; and

g. a program controller configured to:

- (i) receive an input from the user;
 (ii) enable the user to (1) make selections and (2)
45 control one or more user functions of the apparatus;
 (iii) provide detailed information to the user based
upon (1) operations of the program controller as controlled by the
user and (2) predetermined software routines; and
 (iv) provide a control signal to the processor based
50 upon the input, thereby to cause the health related information to be
provided to the user based upon the measurement signal representative
of the blood glucose level and the control signal.

82. (PREVIOUSLY PRESENTED) The apparatus according to claim 81 wherein the processor comprises a video game console.

83. (CURRENTLY AMENDED) The apparatus according to claim 81 further comprising:

a CD-ROM drive₇₁ and ~~wherein the apparatus further comprises~~

5 an interchangeable compact disk removably coupled to the
CD-ROM drive for providing additional functionality to the processor.

84. (CURRENTLY AMENDED) The apparatus according to claim
81 wherein the electrically isolating interface device comprises:

a. means for receiving the measurement signal
representative of ~~a~~ the blood glucose level;

5 b. means for converting the measurement signal
representative of a blood glucose level into a form acceptable to the
processor coupled to the means for receiving; and

c. means for controlling the processor coupled to the
means for converting.

85-95. (CANCELED)

96. (NEW) The system according to claim 48, further
comprising one or more communication ports configured to connect the
blood glucose monitoring system to an "information superhighway".

97. (NEW) The system according to claim 48, further
comprising a slot for accepting a flash memory card.

98. (NEW) The system according to claim 48, wherein the
blood glucose monitoring system is configured for downloading the
particular information obtained from the user to a separate computer.

99. (NEW) The system according to claim 48, wherein the
at least one built-in memory further has stored therein alarm data
and alarm software routines for triggering an alarm if the blood
glucose level as measured falls outside a predetermined range.

100. (NEW) The system according to claim 51, further comprising one or more communication ports configured to connect the system to an "information superhighway".

101. (NEW) The system according to claim 51, further comprising a slot for accepting a flash memory card.

102. (NEW) The system according to claim 51, wherein the system is configured for downloading the particular information obtained from the user to a separate computer.

103. (NEW) The system according to claim 51, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls out side a predetermined range.

104. (NEW) The method according to claim 62, further comprising connecting to an "information superhighway".

105. (NEW) The method according to claim 62, further comprising accepting a flash memory card into a pre-configuration slot.

106. (NEW) The method according to claim 62, further comprising downloading the particular information obtained from the user to a separate server.

107. (NEW) The method according to claim 62, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls out side a predetermined range.

108. (NEW) The apparatus according to claim 75, further comprising one or more communication ports configured to connect the system to an "information superhighway".

109. (NEW) The apparatus according to claim 75, further comprising a slot for accepting a flash memory card.

110. (NEW) The apparatus according to claim 75, wherein the apparatus is configured for downloading the particular information obtained from the user to a separate computer.

111. (NEW) The apparatus according to claim 75, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls outside a predetermined range.

112. (NEW) The apparatus according to claim 81, further comprising one or more communication ports configured to connect the system to an "information superhighway".

113. (NEW) The apparatus of claim 81, further comprising a slot for accepting a flash memory card.

114. (NEW) The apparatus according to claim 81, wherein the apparatus is configured for downloading the particular information obtained from the user to a separate computer.

115. (NEW) The apparatus according to claim 81, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls outside a predetermined range.